Questions

Q1.

The diagram shows a regular pentagon *ABCDE*.

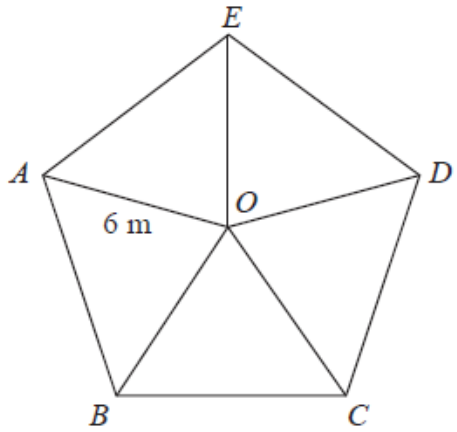

Diagram **NOT** accurately drawn

The pentagon is divided into 5 isosceles triangles.
OA = *OB* = *OC* = *OD* = *OE* = 6 m

Work out the area of the pentagon.
Give your answer correct to 1 decimal place.

..... m^2

(Total for question = 4 marks)

Q2.

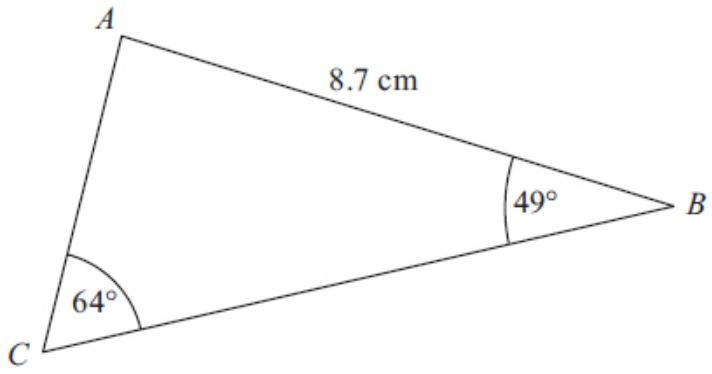

Diagram **NOT** accurately drawn

*ABC*is a triangle.

AB= 8.7 cm.

Angle *ABC*= 49°.
Angle *ACB*= 64°.

Calculate the area of triangle *ABC*.
Give your answer correct to 3 significant figures.

. . . . . cm^2

(Total for Question is 5 marks)

Q3.

* The diagram shows a triangle *DEF* inside a rectangle *ABCD*.

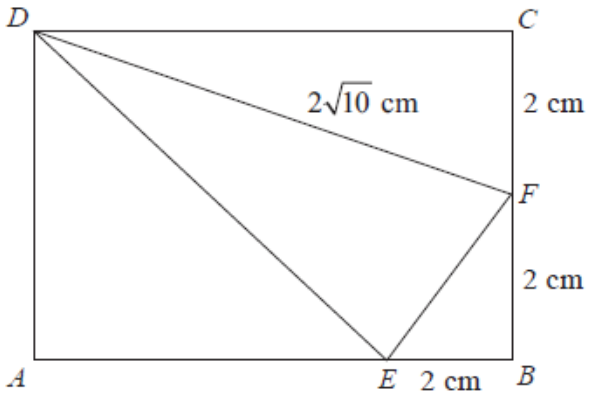

Diagram **NOT** accurately drawn

Show that the area of triangle *DEF* is 8 cm^2.
You must show all your working.

(Total for question = 4 marks)

Q4.

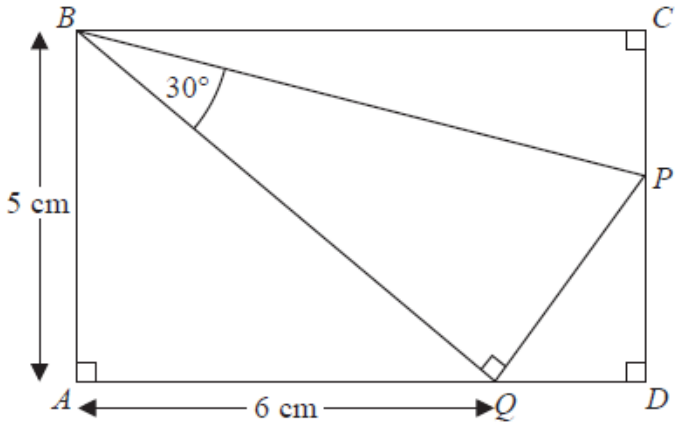

Diagram **NOT** accurately drawn

In the diagram,

ABCD is a rectangle
P lies on the line *CD*
Q lies on the line *AD*
PQB is a right-angled triangle

Work out the length of *BC*.
Give your answer correct to 3 significant figures.
You must show your working.

.....cm

(Total for question = 5 marks)

Q5.

The diagram shows a square *ABCD* inside a circle.

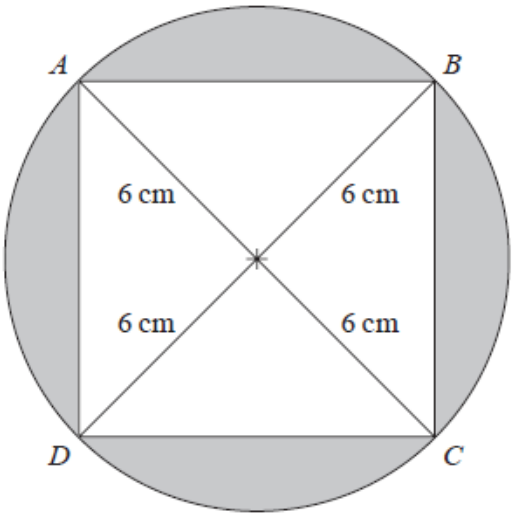

Diagram **NOT** accurately drawn

The points *A*, *B*, *C* and *D* lie on the circle.

The radius of the circle is 6 cm.

Work out the total area of the shaded regions.
Give your answer correct to 3 significant figures.

..... cm^2

(Total for question = 4 marks)